



EXPLORING THE IMPLICATIONS OF SOCIAL MEDIA USE ON THE SUBCONSCIOUS MIND

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ABSTRACT

This article will evaluate past research in attempts to understand the implication social media usage has on the subconscious mind. A brief understanding of social media behavior and responses has been given for better comprehension of the results and discussion sections. The repetitive actions from media usage have developed into the subconscious then acted upon. Issues with this have also been addressed and one key explanation to a potential solution focused on habits as it strongly correlates with the subconscious mind.

KEYWORDS: Subconscious Mind, Conscious Mind, Unconscious Mind, Social Media, Habits, Application Design.

1. INTRODUCTION

The initial purpose for media was to aid in social connections. Media has adapted and undoubtedly changed over the past decades. Alongside that, controversial topics regarding social media and its effects on the brain have also become more ubiquitous. Some common experiences that have been determined to occur as a result of media usage will be provided in this article for better understanding. Before that, a basic understanding of the subconscious mind will also aid in future comprehension. In contrast to the conscious mind, which deals with logic and reasoning, the subconscious takes in all other habitual actions.

1.1 Common Application Design

Several design features have made it into dissimilar applications. A reason as to why there is continuous connectedness with users and social media may be due to common designs within certain applications that are intended to keep users on the application for long periods of time; an average user spends more than an hour on social media.

The Slot Machine

To maintain their continuity and profitable companies, the media has found a way to keep users within a state of need (Lupinacci, 2020). Similar to the function of a slot machine, notifications and other processes have been implemented within many applications. These functions create a variable rewards system in which our brains respond with greater increase in dopamine levels compared to regular rewards (Neyman, 2017). Infinite Scrolling

Today, almost all platforms have utilized this approach in design. It functions as the name suggests, infinite. By loading content nonstop we are vulnerable to consuming much more than intended (Neyman, 2017).

1.2 Inference

Although there are many other design factors (ex.gamification, notifications, illusion of choice, and social reciprocity), these designs make users fall under a state of normative dissociation. The term, according to Lisa D Butler's terminology, is described as a phenomenon in which individuals fall under this flow state of mind where all else surrounding them becomes as though nonexistent (Baughan et al., 2022). This term will be used often throughout the article to describe this flow state.

1.3 Themes of Experiences from Social Media Users

Designers have the power to both encourage normative dissociation, and to disrupt it. The following will explore some responses from individuals after social media usage. Based on a study conducted to test the urge for continuous connectedness in social media, common themes will be briefly explored.

Negative Responses

Some negative themes include fatigue and anxiety. Because of the design platform that keeps users on the application for long durations of time, this creates an experience that may be best described as deadness, and lifelessness. The endless supply of information and content will often create exhaustion. Users may experience boredom and lethargy. In addition, the anxiety aspect to this is a result of a "fear of missing out"; hence their attention is constantly demanded by their notifications (Lupinacci, 2020).

Positive Responses

Some positive responses from participants were formulated into a theme of excitement. Social media has been used as a means for amusement or entertainment. So individuals get excited about stories in real time. Media is also used for support, comfort or help. The stream of users gives others several opportunities of gaining this feeling of "being there" or as Lupinacci (2020) suggests, "making oneself readily available to share an emotional state".

1.4 Inference

Collectively, this understanding will be crucial to the underlying question: What implications does media usage have on the subconscious mind in age groups between 13 and 20? And how or whether the issues, if any, can be addressed?

Materials and Methods

To explore the implications of media use on the subconscious, secondary qualitative research was conducted with a large quantity from Google Scholars and from other published academic and non-academic yet reliable sources.

2. RESULTS & DISCUSSION

2.1 The Subconscious vs. Conscious Mind

In order to understand the proceeding arguments as to how to address issues regarding the topic, it's important to understand the relationship between the conscious and subconscious.

The subconscious mind, as previously mentioned, is involved in the influence of our thoughts, emotions and behavior, while the conscious handles the reasoning and logic. It is further argued here that the subconscious system is highly capable to process sensory information and produce behavior. The benefit of such a dual system is multitasking; the subconscious system can execute background tasks, leaving the conscious system to perform more difficult tasks. A common example of this would be when an individual has driven in the same route several times. Initially, the conscious mind had to have used reasoning and activated sensory systems to respond to the visual stimulus to avoid ditches or narrow parts of the road. Then, because the person has traveled through this route routinely, the action will then develop within their subconscious as they are now able to efficiently drive through the route while pondering on others things, not just driving (Lisman & Sternberg, 2013). Additionally, both systems are capable of sensory processes and action but they relate to different memory stores.

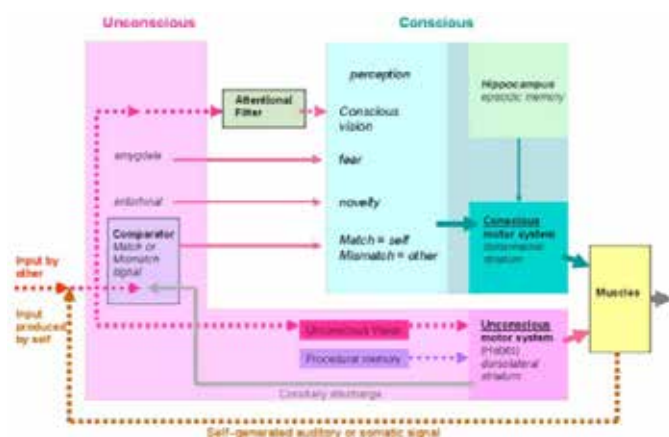


Figure 1: A diagram of conscious and unconscious processes and their communication links.

The proceeding explanation will introduce a relationship with unconsciousness and conscious behavior. The reference to unconsciousness (based on the article) is similar to that of the subconscious given the descriptions within other sources are arguably the same as the descriptions about the unconscious

provided here. Therefore it may be rightly assumed that they are being used interchangeably.

Based on the image, there are limited communication linkages between the unconscious and the conscious, such as: fear, novelty, and match labeled as with the solid pink arrows, and a high-dimensional (pattern) communication link (dashed pink arrows) through an attentional filter. Consciousness can also experience speech produced by the unconscious; the corollary discharge, an important brain function that distinguishes external from self-generated signals, that occurs on conscious or unconscious speech is sent to a comparator in sensory areas. The output of the comparator is normally used to inform conscious regions of whether the auditory signal (related to sense of hearing) is self-generated (Lisman & Sternberg, 2013). Overall, "[a] large part of our decisions is influenced by unconscious motives or that we perform unconscious actions based on completely unconscious thoughts" which are heavily influenced on our conscious thoughts and reactions (Lumer, 2022). A section of this article will focus on developing unconscious motor systems.

2.2 Unconscious Social Media Behavior

Imagine you've just woken up, your alarm goes off and as you attempt to close it, your hand instinctively draws to a social media application. After a few seconds you are now scrolling through the feed and exploring all the other social media application designs. Why is that? Although many have argued it to be the social application designs as the reason for this, which can be argued (given the examples in the introduction), however, because the main focus of the article relates to psychological behavior, the reason may have been a result of developed automatic reflexes (Fearing, 1926). Accessing a social media app is not the only unconscious behavior developed. Response to notifications, and falling into a flow state of scrolling has a psychological impact. Although there are no specific behaviors found (from studies researched) there are common tendencies related to social media that go unnoticed from the users that can result in the responses discussed earlier in the article. To reiterate, social media application designs are a contributing factor as to why many will remain on the media, but the basis in which we respond to these prompts have become so common and habitual.

2.3 Negative Responses/Social Media Impacts

After a few minutes to about an hour or two of media usage, many users experience a feeling of shame and regret; this is common in many users. This observation is based on a study that examined the issue of mental health on specific platforms such as Instagram, Facebook, and Twitter. Instagram as it being a more photo and image media at the time, was largely connected to signs of reduced mental health in adolescents (Ulvi et al., 2022). Other than mental health, social media has also impacted the emotional side of the lives of individuals, as discussed in the beginning of the article.

3. Addressing the Issue with Positive Habitual Actions

The subconscious decision making can be understood closely as how we perceive habits. Several authors, studied by Fearing

(2022), have developed the idea of repetition being able to develop into a reflection or a habit and thus able to go into the unconscious. The former subconscious habitual action, which will now be referred to as 'habits', as discussed in the *subconscious social media behavior* section, can be changed. In other words, we can retrain our brains and take control of our subconscious behaviors.

As described by Kamble (2021), the subconscious follows this system of rules or 'habits' that have been enforced from either repetition or experience. However, the conscious mind initiates the logic and reason as to why these rules must be followed. With similar methods used in *Think and Grow Rich*, *Atomic Habits*, *Your Subconscious Power*, and others, we can get a basic understanding of how to change negative social media habits.

3.1 Formulating a Habit

A commonality seen from all three literatures and a few other articles was the initiation of self awareness and the capability to be able to notice the urge to do something (negatively) and not act on it. Although this is not the most efficient way, it is a starting point. The idea is to primarily reflect on your daily usage and routine. Once aware of your standing and quantity of media usage, you then need to pursue your goal with yourself in mind. For instance, your goal may be to decrease your screen time on media or resist the impulse to check your notifications right when you wake up. The 'self in mind' is recognizing why you're doing this; it may be because you crave self improvement, or you wish to have control over these unnoticed actions. Following this, a substitute for the current habit will be needed, like restricting yourself of media usage until a certain time frame. Although there are several other methods the idea is to repeatedly act on this until this has become a habit, or until you've subconsciously followed through with it.

Limitations and Future Research Directions

Although the sources used have sufficed for the general understating of the subconscious and social media, it remains insufficient when requiring a deeper understanding. This may be partly due to the several approaches different fields (of psychology) have taken into this topic. As a result, some behaviors were not specified and only a brief understanding of habitual actions was given. Potentially in the future, a deeper study of past experiments may aid in further understanding and knowledge of the topic. Alongside that an empirical method may also be useful as it would provide a more visual representation with relevant data. A potential survey could be put forth to understand current behavior among the target age range. Following that, another test followed a subset of respondents to collect live data to test the hypothesis.

REFERENCE

1. Acker, F. (2008). New findings on unconscious versus conscious thought in decision making: additional empirical data and meta-analysis. *Judgment and Decision Making*, 3(4), 292–303. <https://doi.org/10.1017/s1930297500000863>
2. Baughan, A., Zhang, M. R., Rao, R., Lukoff, K., Schaadhardt, A., Butler, L. D., & Hiniker, A. (2022a). "I don't even remember what I read": How design influences dissociation on social media.

- CHI Conference on Human Factors in Computing Systems. <https://doi.org/10.1145/3491102.3501899>
3. Baughan, A., Zhang, M. R., Rao, R., Lukoff, K., Schaadhardt, A., Butler, L. D., & Hiniker, A. (2022b). "I don't even remember what I read": How design influences dissociation on social media. CHI Conference on Human Factors in Computing Systems. <https://doi.org/10.1145/3491102.3501899>
4. Brewer, J. A. (2019). Mindfulness training for addictions: has neuroscience revealed a brain hack by which awareness subverts the addictive process? *Current Opinion in Psychology*, 28, 198–203. <https://doi.org/10.1016/j.copsyc.2019.01.014>
5. Clear, J. (2018). *Atomic habits: tiny changes, remarkable results : an easy & proven way to build good habits & break bad ones*. New York, New York, Avery, an imprint of Penguin Random House.
6. Fearing, F. (1926). Motor automatisms and reflex action. *Psychological Bulletin*. <https://doi.org/10.1037/h0071295>
7. Gardner, B., Lally, P., & Wardle, J. (2012). Making health habitual: the psychology of 'habit-formation' and general practice. *British Journal of General Practice*, 62(605), 664–666. <https://doi.org/10.3399/bjgp12x659466>
8. Hill, N. (2007). *Think and grow rich*. Jeremy P Tarcher.
9. Kamble, P. (2021). What is Subconscious Mind? How Does it Impact our Behaviour? Social Science Research Network. <https://doi.org/10.2139/ssrn.3806525>
10. Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P. P., Dwivedi, Y. K., & Nerur, S. (2017). Advances in social Media Research: past, present and future. *Information Systems Frontiers*, 20(3), 531–558. <https://doi.org/10.1007/s10796-017-9810-y>
11. Korte, M. (2020). The impact of the digital revolution on human brain and behavior: where do we stand? *Dialogues in Clinical Neuroscience*, 22(2), 101–111. <https://doi.org/10.31887/dens.2020.22.2/mkorte>
12. Lisman, J., & Sternberg, E. J. (2013). Habit and Nonhabit Systems for unconscious and conscious behavior: Implications for Multitasking. *Journal of Cognitive Neuroscience*, 25(2), 273–283. https://doi.org/10.1162/jocn_a_00319
13. Lumer, C. (2019). Unconscious motives and actions – agency, freedom and responsibility. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.02777>
14. Lupinacci, L. (2020). 'Absentmindedly scrolling through nothing': liveness and compulsory continuous connectedness in social media. *Media, Culture & Society*, 43(2), 273–290. <https://doi.org/10.1177/0163443720939454>
15. Moretta, T., Buodo, G., Demetrovics, Z., & Potenza, M. N. (2022). Tracing 20 years of research on problematic use of the internet and social media: Theoretical models, assessment tools, and an agenda for future work. *Comprehensive Psychiatry*, 112, 152286. <https://doi.org/10.1016/j.comppsy.2021.152286>
16. Murphy J. (1973/1963). *The power of your subconscious mind (Reward)*. Prentice-Hall.
17. Sapolsky, R. M. (2017). *Behave: The biology of humans at our best and worst*. Penguin Books
18. Schroyer, D. (2020). Media effects on individual worldview and wellness for Long-Term care residents amid the COVID-19 virus. *Gerontologist*, 61(1), 8–12. <https://doi.org/10.1093/geront/gnaa095>
19. Ulvi, O., Karamahic-Muratovic, A., Baghbanzadeh, M., Bashir, A., Smith, J., & Haque, U. (2022). Social Media Use and Mental Health: A Global analysis. *Epidemiologia*, 3(1), 11–25. <https://doi.org/10.3390/epidemiologia3010002>